Work Order II October-19-12 1:06:.		, /	*918	195*				414		Page 1
Item ID: 647 Revision ID: Item Name: Strut	40		ccept	*N9000	140	100)* s	etup Star Stop	I VI .	S1* S2*
Start Date: 10/18 Required Date: 11/09 Reference:	8/12 Start Qty: 45,00	*45* *45*		Cust Item ID: Customer:						
Approvals: Pro		Date: 12-10-22	Tooling: SPC (Y/N):	Date			R	dun Star Stop	, "I V I	R1* R2*
Sequence ID/ Work Center ID	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. · Stamp
Draw Nbr	Revision Nbr									
647.2600	N/C									
*110 *110* Doosan Doosan Lathe	Memo TURN AS PER DWG REV:_A FOLIO REV:_ DEBURR	/c	0.00	12) 16/2 7	7		47			
120 *120* QC Quality Control	QC2- Inspect parts off mach	ine FAI/FAIB	0.00 ZZ	1270/17			47	6		·

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											DQA:	Date:	\$ * *
NCR: Y	'es	/ No				WORK ORDER	R NON-CO	NFOR	MANCE / UPDA	ATE	-		1- 3
			_						·		QA Closed:	Date:	
Morle Orde						DISPOSIT	ION			AGAINST DE	PARTMENT/	PROCESS	
Nork Orde	er:						lework		Skid-tube	Crosstube]	Water Jet	Engineering
Part N	10.						Scrap se-as-is		Machining noforming	Small Fab Finishing	4	d. Eng. Coor.	Quality Other
NCR I	10.					Work Order U	 	111611	~ - —	Composite	1 100	Supplier	
Root					Descr	ription of work order	update	Initial	Actio	n	Sign &		
Cause		Date	Step	Qty		or Non-conformance	e (Chief Eng	Descrip	otion	Date	Verification	QC Inspector
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Inapproved				<u></u>	<u> </u>		 ΕΔΙ	JLT CATE	GORY		<u> </u>	· · · · · · · · · · · · · · · · · · ·	
Landi	ng (Gear				General	174	JET CATE	JOKI				
20		Bending			Γ	Bend	Γ	Grain			Ovalized	Γ	Pressure/Forced
		Centre No	ot Conce	ntric to	o/s	BOM/Route	<u> </u>	 Hardwa	are		Over/Under	tolerance	Temperature/Cure
		Cracks				Broken/Damaged		Inspect	ion Incomplete		Part Incorre	ct 📙	Weld
		Crushed/0	Crimped.	-		Burrs			tions Incomplete/Ur	nclear	Part Lost/Mi	ssing	Wrong Stock Pulled
		Cuffs	·		r	Contamination		Maint	enance		Part Moved	<u> </u>	_
		Heat Trea	it			Countersink	Ţ	Mislab	eled		Positioned V	Vrong	
		Inspection	n Strip in	Tube		Cut Too Short		Misrea	d		Power Loss/	Surge	Other
		Ripples in	Bend		Γ	Drill Holes		Offset					
		Torque W	/aves in E	Extrusio	n [Drawing		Out of	Calibration				
		Turning S	equence	!		Finish		Out of	Sequence				
		Wave/Tw	ist in Tul	be	[Folio	Γ	Outsid	e Dimensions				

										DQA:	Date:	, ,
NCR: Y	es / No				WORK ORDER NON-	CO	NFORM	AANCE / UPDATE		•		. * *
	·									QA Closed:	Date:	
				·	DISPOSITION			AGAII	NST DE	PARTMENT/	PROCESS	
Work Orde	r:				, ,–	٦					Water Jet] Facinossing
					Rework	-	١.	Skid-tube Crosstu Machining Small	_ ⊢	Dro	d. Eng. Coor.	Engineering Quality
Part N	10.			<u> </u>	Scrap Use-as-is	-		Machining Small noforming Finish	_		e/Packaging	Other
NCR N	lo.				Work Order Update	1	mem	Large Fab Compos	~ - —	Nec/3toi	Supplier	1 0(1)61
NCK IV	<u> </u>				Work Order opdate			carge rab compo			54ppe. [ا ا
Root				Descri	ption of work order update	T	Initial	Action		Sign &		
Cause	Date	Step	Qty	(or Non-conformance	Ch	nief Eng	Description		Date	Verification	QC Inspector
Doc/Data												
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				*		AUI	LT CATE	GORY				
Landii	ng Gear				General	_	٦		_	1		٦
~^	Bending				Bend	-	Grain		_	Ovalized	_	Pressure/Forced
	Centre N	ot Conce	ntric to	o/s	BOM/Route	-	Hardwa		<u> </u>	Over/Under		Temperature/Cure
	Cracks			ļ	Broken/Damaged	_	4 '	ion Incomplete	<u> </u>	Part Incorre		Weld
_	Crushed/	Crimped			Burrs	<u> </u>	-1	tions Incomplete/Unclear		Part Lost/M	issing	Wrong Stock Pulled
-	Cuffs				Contamination	\vdash	Mainte		<u> </u>	Part Moved		
	Heat Trea	at		1	Countersink	-	Mislab	eled	1	Positioned \	Vrong	

Misread

Out of Calibration

Out of Sequence

Outside Dimensions

Offset

Power Loss/Surge

Other

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Inspection Strip in Tube

Torque Waves in Extrusion

Cut Too Short

Drill Holes

Drawing

Finish

Work Orde		895		*918	395*						Page	3
Item ID: Revision ID: Item Name:	647.2010 Strut			Accept	*N900	040	100)* s	etup Star	1.71	S1* S2*	
Start Date: Required Date: Reference:	10/18/12 11/09/12	Start Qty: 45.00 Req'd Qty: 45.00	*45* *45*		Cust Item Customer:							
Approvals:	Process Pl	an:	Date:	Tooling: SPC (Y/N):		ate:		R	tun Star Stop	1/1	R1* R2*	
Sequence ID/ Work Center II 200 *200* QC Quality Control	D	Operation Description QC5- Inspect part comple	teness to step on W/O	Set Up/ Run Hours 0.00 AS 16 0.00	Tool ID	Tool#	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp	-
201 *201 *201 * SprayPaint Spray Painting		Memo PRIME AS F CARDINAL	ER DWG 4860-50 PRIMER BATC	0.00 0.00 H: <u>12369</u> 3				47		Ø	Ag. 12-12.	- -1 6 :
²⁰³ *203* _{QC}		QC14- Inspect Spray Pair		0.00				47			(05)	12-12-18

Quality Control

NCR:	Yes	/	No

DQA:

Date:

NCR: \	es'	/ No				WORK ORDER NON-	COL	NFORM	MANCE / UP	PDATE			₩ 😘
		,							,		QA Closed:	Date:	
Vork Orde	ır.					DISPOSITION				AGAINST DE	PARTMENT	PROCESS	
VOIK OIG	٠'٠,					Rework	٦		Skid-tube	Crosstube]	Water Jet	Engineering
Part N	lo.					Scrap	1		Machining	Small Fab	Prod	d. Eng. Coor.	Quality
	•	· -				Use-as-is		Therm	noforming	Finishing	Rec/Stor	e/Packaging	Other
NCR N	10.					Work Order Update			Large Fab	Composite]	Supplier	
Root					Descr	ription of work order update	T	Initial	Ad	ction	Sign &		
Cause		Date	Step	Qty		or Non-conformance	Ch	ief Eng	Desc	cription	Date	Verification	QC Inspector
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Landi	ng (Gear			_	General	_	7			7	_	_
		Bending			<u> </u>	Bend		Grain			Ovalized	_	Pressure/Forced
		Centre No	ot Concer	ntric to	o/s	BOM/Route	_	Hardwa	re		Over/Under	 	Temperature/Cure
		Cracks			L	Broken/Damaged	<u> </u>	Inspect	ion Incomplete		Part Incorre		Weld
	L.,	Crushed/	Crimped.			Burrs		Instruct	ions Incomplete	e/Unclear	Part Lost/Mi	issing	Wrong Stock Pulled
,		Cuffs				Contamination		Mainte	enance	L	Part Moved		
١	.3	Heat Trea	it			Countersink		Mislabe	eled		Positioned V	Vrong	_
		Inspection	n Strip in	Tube		Cut Too Short		Misread	t		Power Loss/	Surge	Other
		Ripples in	Bend			Drill Holes		Offset			·		
		Torque W	aves in E	xtrusio	n [Drawing		Out of	Calibration				
		Turning S	equence			Finish		Out of !	Sequence				
		Wave/Tw	ist in Tul	ре	Γ	Folio		Outside	Dimensions				

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Work Orde		895		*918	395*							Page 4
Revision ID: Item Name:	647.2010 Strut 10/18/12	Start Qty: 45.00	*45*	Accept	*N900 Cust Item I		100)*	Setup	Start Stop	1 71 4	S1* S2*
Required Date: Reference:	11/09/12	Req'd Qty: 45.00	*45*		Customer:		_			S 454		
Approvals:	Process Pla	an:	Date:			ate:			Run	Start Stop	*N *N	R1* R2*
Sequence ID/ Work Center II 210 *21 \(\hat{7}\) Packaging Packaging)	Operation Description Identify as per dwg & Sto Memo ***IDENTII	ock Location S S	Set Up/ Run Hours 0.00 0.00 P-120 BY STAMPING P#	Tool ID	Tool#	Plan Code	Accept Qty	Rej Qty		Reject Number	Insp. Stamp
220 * 77 * QC Quality Control		QC21- Final Inspection -	Work Order Release	0.00					/	13/	1/10	X 12-

										DQ	(Α:	Dat	e: _	, ,
NCR: Y	es / No				WORK ORDER NON-O	201	NFORN	AANCE / UPD	ATE			_		• •
		= .								QA Close	ed:	Dat	e:	·
· · · · · · · · · · · · · · · · · · ·					DISPOSITION				AGAINST DE	PARTMEI	NT/P	ROCESS		
Work Orde	er:				Rework	1		Skid-tube	Crosstube	i		Water Jet	\neg	Engineering
Part N	lo				Scrap	1 1	ľ	Machining	Small Fab	1		Eng. Coor.		Quality
NCR N	lo			<u>.</u> .	Use-as-is Work Order Update			noforming Large Fab	Finishing Composite	Rec/S	itore,	/Packaging Supplier		Other
Root				Descri	ption of work order update	Ī	nitial	Actio	on	Sign &				
Cause	Date	Step	Qty	(or Non-conformance	Ch	ief Eng	Descrip	otion	Date		Verification		QC Inspector
Doc/Data														
Equip/Tooling											1			
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Landi	ng Gear				General		•		,	٦		ı		
	Bending				Bend		Grain			Ovalized				Pressure/Forced
	Centre N	lot Conce	ntric to	o/s	BOM/Route	L	Hardwa	re		Over/Un	der to	olerance		Temperature/Cure
	Cracks				Broken/Damaged		Inspecti	ion Incomplete		Part Inco	rrect			Weld
	Crushed	/Crimped	l.		Burrs	L	Instruct	ions Incomplete/Ur	nclear	Part Lost	:/Miss	sing		Wrong Stock Pulled
	Cuffs				Contamination		Mainte	nance		Part Mov	ved			
	Heat Tre	at			Countersink		Mislabe	eled		Position	ed Wi	rong		•
	Inspection	on Strip ir	ı Tube		Cut Too Short		Misread	ţ		Power Lo	oss/Si	urge		Other

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

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Picklist Print

³ October-19-12 1:06:35 PM

Work Order ID:

91895

Parent Item:

647.2010

Parent Item Name:

Strut

Start Date: 10/18/12

Required Date: 11/09/12

Start Qty: 45.00

Required Qty: 45.00

Comments:

IPP REV:A NEW ISSUE 12-10-09 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6R0.563		Purchased	No				f	106.0000		71.052632			
6061-T6 ROUND BAR .5	63								(** · · · · · · · · · · · · · · · · · ·		7		1/4/0
				Location		Loc Qty	Lo	c Code			7.	7 /	דוסים
				MAT		10				- 1×			
				1232	18	10			7	-5 KI	1 2	2 (1	<u>/</u>
				MAT012		96				$ \Lambda_{\Lambda}$	/ 7.	2-300	
				1232	94	96			6	ミザ	/		

										DQA:	Date	;
NCR:	res / No				WORK ORDER NON-C	100	NFORM	MANCE / UPDATE		04.61	Data	· • •
					<u>'</u>	-				QA Closed:	Date	
)					DISPOSITION			AGAINST	DE	PARTMENT/	PROCESS	
Work Orde	er:				Rework	1		Skid-tube Crosstube	\Box		Water Jet	Engineering
Dart N	do.				Scrap	1	١	Machining Small Fab	_	Prof	d. Eng. Coor.	Quality
Part N	NO.				Use-as-is	1		noforming Finishing	-	1	e/Packaging	Other
NCR N	No.				Work Order Update	1 1	l .	Large Fab Composite	_	,	Supplier	1
						4		,				
Root				Descri	ption of work order update		nitial	Action		Sign &		
Cause	Date	Step	Qty		or Non-conformance	Ch	ief Eng	Description		Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling												
Operator												
Material			·	ļ !								
Setup											in	
Other												
Process												
Supplier												
Training												
Unapproved		<u> </u>				_						
						AUI	T CATE	GORY				
Landi	ng Gear				General	_	1			٦ .	Г	-
	Bending			ļ	Bend	<u>_</u>	Grain		<u> </u>	Ovalized	<u> </u>	Pressure/Forced
	Centre N	ot Conce	ntric to	o/s	BOM/Route		Hardwa		<u> </u>	Over/Under		Temperature/Cure
	Cracks			<u> </u>	Broken/Damaged	\vdash	1	ion Incomplete	<u>_</u>	Part Incorre		Weld
	Crushed/	Crimped	-	<u> </u>	Burrs	<u></u>	-	tions Incomplete/Unclear	\vdash	Part Lost/Mi	issing	Wrong Stock Pulled
	Cuffs			<u> </u>	Contamination	<u> </u>	Mainte		\vdash	Part Moved		
	Heat Tre	at			Countersink		Mislabe	eled	1	Positioned V	Vrong	

Misread

Out of Calibration

Out of Sequence

Outside Dimensions

Offset

Power Loss/Surge

Other

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Inspection Strip in Tube

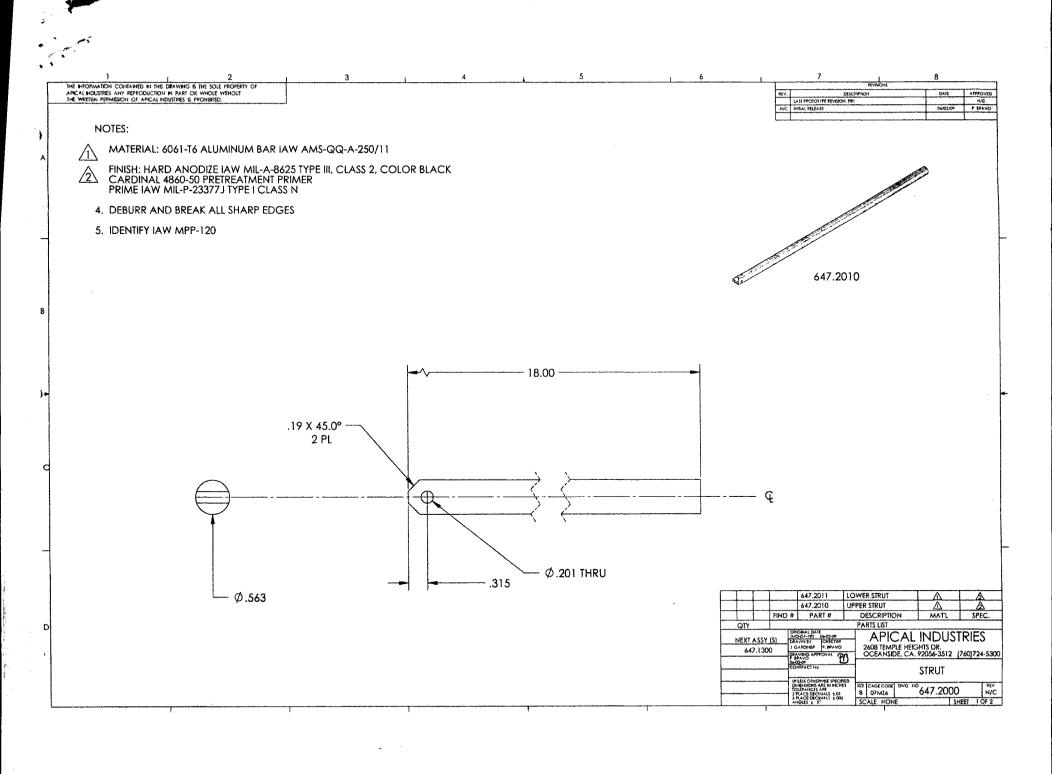
Torque Waves in Extrusion

Cut Too Short

Drill Holes

Drawing

Finish



DART AEROSPACE LTD	Work Order:	91895
Description: Strut	Part Number:	647.2010
Inspection Dwg: 647,200) Rev: N/C		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

		ARTIOLE III	1	1		
Drawing Dimension	Tolerance	Actual Dimension	, Accept	Reject	Method of Inspection	Comments
6,563	±.005	-583	1		54-42	Usin
.19 x 45°	+00/+.5	19145				
-315	±.005	314				
0.201	4.006/00	0.201	/			
18.00	-,o)o	18,005			A 1000	Ve/L 24"
						
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		·				
					J	
Measured by:		Audited by:	DAS		Proliminous As	

Measured by:		Audited by:	14	Preliminary Approval:	
Date:	12/0/21	Date:	12/10/29	Date:	
	-		, , , , , , , , , , , , , , , , , , , ,		

Rev	Date	Change	Revised by	Approved
E 1	0.04.14	Added preliminary approval	KJ	

								- 4			DQA.	Date	:.	
NCR:	Yes / No				WORK ORDER NON	I-CO	NFORI	MANCE / U	PDATE		QA Closed:	Date		
					<u> </u>		1				QA Closed.	Date	:.	
Work Orde	er:				DISPOSITION				AGA	INST DE	PARTMENT,	/PROCESS	4	
Part No.				Rework Skid-tube Crosstube Scrap Machining Small Fab			l Fab	Water Jet Prod. Eng. Coor.			luality			
NCR N	No				Use-as-is Work Order Update		Thern	noforming Large Fab	Fini: Comp	shing osite	Rec/Sto	re/Packaging Supplier		Other
Root				Descri	ption of work order update		Initial	Д	ction		Sign &			
Cause	Date	Step	Qty	(or Non-conformance	Cł	nief Eng	Des	scription		Date	Verification	· QC I	nspector
Doc/Data											<u>.</u>	1		
Equip/Tooling														
Operator		,	**			İ		ļ						
Material														
Setup		1												
Other										٠,				
Process								1		• •				
Supplier							• •		~ !					
Training		•								•				
Unapproved										į				
						FAU	LT CATE	GORY			•			
Landi	ng Gear	•			General		_				_	_		
	Bending	, · .	-		Bend		Grain.				Ovalized		Pressure	e/Forced
Centre Not Concentric to O/S		BOM/Route	Hardware Inspection Incomplete			Over/Under	tolerance	Tempera	ature/Cure					
Cracks Crushed/Crimped					Broken/Damaged		Part Incorre	ct	Weld	•				
			Burrs		Instructions Incomplete/Unclear				Part Lost/M	issing	Wrong S	Stock Pulled		
	Cuffs			7	Contamination	*	Mainte	enance	-		Part Moved	_		
	Heat Tr	eat			Countersink		Mislabe	eled		<u> </u>	Positioned \	N rong		
	Inspecti	on Sţrip ir	ı T <u>u</u> be		Cut Too Short		Misread	d		. [Power Loss,	/Surge	Other	

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev.G

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drill Holes

Drawing Finish

Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON K6A 1K7 ~Tel: 613 632 9577

OUTSTANDING PO REPRINT

Purchase Order ID PO18295

Purchase Order Date 10/31/12 PO Print Date 11/05/12

Page Number 2 of 2

Order From:

VC-ATG001

A.T.G. INDUSTRIES INC. 731 INDUSTRIELLE ROAD ROCKLAND, ON K4K 1T2 **CANADA**

Contact Name

Vendor Phone

613-446-4544

Vendor Fax

613-446-4556

Vendor Account Nbr

Buyer

Chantal Lavoie

Requisition Nbr

Tax Resale Nbr

10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req I	Date/ able	Req Qty	Unit Price	Extended Price
4	91895	647.2010 STRUT	11/09/12 Yes	47.00	Dart Truck	\$5.9490	\$279.60
		Special Inst:	FINISH: HARD BLACK PER IAW MIL-A-8625, TYP		_	.ine Total:	\$279.60
5	91802	647.2010 STRUT	11/09/12 Yes	12.00	Dart Truck	\$5.9490	\$71.39

Special Inst:

FINISH: HARD BLACK ANODIZE AS

Line Total:

\$71.39

IAW MIL-A-8625, TYPE III, CLASS 2

Outstanding PO Total:

\$672.24

CERTIFICATE OF CONFORMITY REQ'D UPON DELIVERY

Change Date: 11/05/12

No substitution or deviation without consent.

Certificate of Conformity or Material NO

Change Nbr: 2

Certification required - YES



A.T.G. Industries Inc. 731, rue Industrielle Rd. PLATING DEPARTMENT Rockland, On K4K 1T2 Canada

Ph: (613) 446-4544 Fax: (613) 446-4556

Pack List

Number: 62036

Date: 09-Nov-12

To

DART AEROSPACE LTD 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 Canada Ship To

DART AEROSPACE LTD 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7

Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

FII. 013-032-32	00 Fax. 013-032-1105	۲	n: 613-632-5200	rax: 013-032-1105	
Terms		Ship Via			
					·
Quantity	Description				
1	Part: ASST		Rev:		
lot	4 PCS 647.1712 50 PCS 647.4713 59 PCS 647.2010 47/12	,			
	HARD ANODIZE BLACK MIL-A-8625 TYPE III CLASS 2 Job: 20120687	PO: PO18295 `	Line:		
	Certificate of Conf	ormance			-
	A.T.G. Industries certifies that all items in with all requirements, specifications and	n this shipment are in drawings referenced	conformance in the purchase order.		
	ISO 9001 : 2008 REG ATG SALES-2010 TEI DATE : 7/11/1]_ CERTIFIED SIGNATURE :		_		
	RECEIVER SIGNATURE :		-		